DETAILED ACTION

Response to Amendment

In response to the amendment received on January 31, 2011:

- claims 11-15, 25 and 26 are presently pending
- all previous prior art rejections are withdrawn in light of the amendments to the claims
- claims 11-15, 25 and 26 are allowed

Response to Arguments

1. Applicant's arguments, see Remarks at pages 4-6, filed January 31, 2011, with respect to the rejection(s) of claim(s) 11-14 under HOTTA in view of FRIESE; and also with respect to the rejection(s) of claims 11-15 under JAIN in view of FRIESE; and finally the rejection(s) of claim(s) 11-15 under OGASAWARA in view of FRIESE II have been fully considered and are persuasive. Therefore, the rejections of claims 11-15 as set forth previously have been withdrawn.

Allowable Subject Matter

2. Claims 11-15, 25 and 26 are allowed.

The following is an examiner's statement of reasons for allowance:

U.S. Pub. No. 2002/0060152 to Hotta et al., (hereinafter referred to as "HOTTA"); U.S. Pat. No. 5,486,279 to Friese (hereinafter referred to as "FRIESE III"); U.S. Pat. No. 4,402,820 to Sano et al., (hereinafter referred to as "SANO"); and U.S. Pat. No. 6,537,431 to Tatsumoto et al., (hereinafter referred to as "TATSUMOTO") represent the most relevant prior art.

FRIESE III is representative of the general state of the art wherein a solid electrolyte gas sensor is known to have a series of protective layers covering the solid electrolyte and outer electrode (see figure 1 and col. 4 lines 8-34). However, FRIESE III fails to teach the sensor element having a three-layered protective coating with a protective layer, a porous protective lining and a porous adhesive layer as claimed.

Moreover, although HOTTA teaches a three-layer protective coating (see figure 1), HOTTA fails to teach the protective layer, porous protective lining and porous adhesive layer as claimed. Instead the middle layer of HOTTA is employed as a catalytic layer (see ¶38) and not as an adhesive layer covering the porous protective lining as claimed.

Furthermore, SANO and TATSUMOTO both teach the use of an adhesive layer in adhering the protective ceramic coatings to the rest of the sensor in a solid electrolyte gas sensor (see SANO at figure 2 and col. 2 line 64-col. 3 line 10; TATSUMOTO at figures 4 and 5 and col. 8 lines 25-34). However, in both applications the references teach the use of the adhesive so as to obtain better adhesion between the ceramic protective layer and the electrode (see SANO at col. 3 lines 1-2) or the solid electrolyte

layer (see TATSUMOTO at col. 8 lines 25-27). However, neither SANO nor TATSUMOTO teach the adhesive layer covering the protective lining with the adhesive layer, protective lining, and protective layer having the composition as claimed.

Therefore, it is the Examiner's opinion that the cited prior art neither teaches nor fairly suggests to one of ordinary skill in the art the solid electrolyte gas sensor having the series of protective layers, i.e. a protective lining, adhesive layer, and protective layer having the composition and structure as claimed in independent claim 11.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRYAN D. RIPA whose telephone number is 571-270-7875. The examiner can normally be reached on Monday to Friday, 9:00 AM to 5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexa Neckel can be reached on 571-272-1446. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Harry D Wilkins, III/
Primary Examiner, Art Unit 1723

/B. D. R./
Examiner, Art Unit 1723